MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
TITLE V OPERATING PERMIT TECHNICAL REVIEW DOCUMENT

Air, Energy & Mining Division
Air Quality Bureau
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WBI Energy Transmission, Inc.
Fort Peck Compressor Station
SW¼ of the SE¼ of Section 28, Township 27 North, Range 41 East, in Valley County, Montana
23 MDU Road
Nashua, MT 59248

The following table summarizes the air quality programs testing, monitoring, and reporting requirements applicable to this facility:

Facility Compliance Requirements	Yes	No	Comments
Source Tests Required	X		Methods 7 & 10
Ambient Monitoring Required		X	
Continuous Opacity Monitoring System (COMS) Required		X	
Continuous Emission Monitoring System (CEMS) Required		X	
Schedule of Compliance Required		X	
Annual Compliance Certification and Semi-annual Reporting Required	X		As applicable
Monthly Reporting Required		X	
Quarterly Reporting Required		X	
Applicable Air Quality Programs			
Administrative Rules of Montana (ARM) Subchapter 7 Montana Air Quality Permit (MAQP)	X		#2803-03
New Source Performance Standards (NSPS)		X	
National Emission Standards for Hazardous Air Pollutants (NESHAPS)		X	Except for 40 CFR 61 Subpart M
Maximum Achievable Control Technology (MACT)	X		40 CFR 63, Subpart ZZZZ
Major New Source Review (NSR) – includes Prevention of Significant Deterioration (PSD) and/or Non-attainment Area (NAA) NSR		X	
Risk Management Plan Required (RMP)		X	
Acid Rain Title IV		X	
Compliance Assurance Monitoring (CAM)		X	
State Implementation Plan (SIP)	X		General SIP

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I. GENERAL INFORMATION

A. Purpose

This document establishes the basis for the decisions made regarding the applicable requirements, monitoring plan, and compliance status of emissions units affected by the operating permit proposed for this facility. The document is intended for reference during review of the proposed permit by the U.S. Environmental Protection Agency (EPA) and the public. It is also intended to provide background information not included in the operating permit and to document issues that may become important during modifications or renewals of the operating permit. Conclusions in this document are based on information provided in the original operating permit application received by the Department on June 12, 1996; the first renewal application received on April 29, 2002; the second renewal application received by the Department on December 19, 2007; administrative amendments received on December 10, 2012 and October 17, 2013; and the third renewal application received September 10, 2013. A renewal application was received on December 20, 2018.

B. Facility Location

WBI Energy Transmission, Inc. (WBI) owns and operates the Fort Peck Compressor Station. This facility is located in the SW¼ of the SE¼ of Section 28, Township 27 North, Range 41 East, in Valley County, Montana. Valley County is designated as an Unclassifiable/Attainment area for National Ambient Air Quality Standards (NAAQS) for all criteria pollutants. The Fort Peck Compressor Station has a total property area of five acres. This facility is located approximately five miles west of the Fort Peck Indian Reservation, a PSD Class I Area.

C. Facility Background Information

The Fort Peck Compressor Station was constructed by the Montana Dakota Utilities Company, WBI's predecessor, in 1940. The name of the company later became Williston Basin Interstate Pipeline Company (WBIPC). This facility originally had two compressor engines, and by 1947 nine low horse power natural gas fired compressor engines were operating at the site. In 1983 the facility was renovated. Nine auxiliary power engines were removed and eight Ingersoll-Rand 8XVG compressor engines were replaced by three 800-horsepower (hp) Superior 6GTL turbocharged compressor engines. By spring of 1984, all engines installed prior to 1947 were retired from service and removed from the site.

Montana Air Quality Permit (MAQP)

WBIPC's application for a Montana Air Quality permit for the Fort Peck Compressor Station was received on November 10, 1992, and was given **MAQP Application #2755-00**. The application was deemed incomplete by the Montana Department of Health – Air Quality Division now Department of Environmental Quality (Department) on November 9, 1992, for lack of a Best Available Control Technology (BACT) determination, an air quality analysis, an additional impact analysis, incomplete information on the site drawing, and lack of an application fee. In this application Nitrogen Oxides (NO_x) emissions from the three 800-hp Superior compressor engines were calculated using the manufacturer's emission factor of 15 grams/hp-hr and totaled 401.6 tons per year (TPY). Prior to the 1983 renovation, total NO_x emissions were estimated to be 200.4 TPY; thus NO_x emissions

increased by 201.2 TPY. Therefore, the Department determined that the facility was subject to PSD regulations and notified WBIPC in a letter dated December 15, 1992.

In May of 1993, WBIPC conducted an emissions test on one of the 800-hp Superior engines in order to accurately model air emissions. This test revealed that the NO_x emission rate was 6 grams/hp-hr. WBI re-submitted a permit application for the Fort Peck Compressor Station on September 29, 1993. The Department assigned this MAQP Application #2803-00. NO_x emissions for the compressor engines were calculated using a BACT value of 7.5 grams/hp-hr, and the facility total was estimated to be 227 TPY of NO_x. When compared to the pre-renovation total of 201.2 TPY, the net NO_x emission increase from operating the three Superior engines was actually less than 26 TPY. Therefore, the Department concluded that the Fort Peck Compressor Station was not subject to PSD.

On November 4, 1993, the Department deemed MAQP Application #2803-00 incomplete due to an incomplete BACT analysis. The additional BACT information was submitted by early December 1993; however, the Department issued another incompleteness letter on January 10, 1994, citing incorrect emission rates used for the dispersion modeling. WBIPC revised the dispersion modeling and submitted it on February 9, 1994. The Department issued the Preliminary Decision (PD) on March 14, 1994, that required the installation and operation of air/fuel ratio (AFR) controllers on the three compressor engines and the generator engine and established NO_x, Carbon Monoxide (CO), and Volatile Organic Compounds (VOC) emission limits for each engine.

WBIPC's response to the PD included: a request to test only one of the three identical Superior compressor engines, a request to postpone source testing and installation of an AFR controller on the emergency generator engine until the unit it was placed into continuous service, and a request to increase the generator engine CO emission limit from 1.59 lb/hr to 8.73 lb/hr. This response also pointed out transposed numbers for CO and VOC emission limits for the compressor engines. In the draft Department Decision (DD) issued on April 6, 1994, the Department responded by correcting the transposed CO and VOC emission limits for the compressor engines, by eliminating the AFR controller and the testing requirement for the generator engine, and by raising the CO emission limit for this unit.

A second draft DD was issued on April 11, 1994, and made provisions for establishing the generator as the permanent main electrical power supply when it becomes economical; at which time an AFR controller would be installed on the generator engine and an emissions test would be required. The DD was issued on April 13, 1994, and in a letter received by the Department on April 14, 1994, WBIPC found these terms and conditions acceptable. The final permit, **MAQP #2803-00**, was issued on April 28, 1994.

In May of 1994, WBIPC submitted the required information on the compressor engines AFR controllers. In February of 1995, WBIPC submitted a request to rescind the BACT determination and reduce the NO_x emissions from the compressor station by installing clean-burn kits on two compressor engines while allowing the third rich burn engine to run at best fuel economy. On May 30, 1995, the Department issued a letter stating that ARM 17.8.715 did not allow the Department to suspend a previous BACT determination; thereby the original BACT determination and emission limits were upheld.

In July of 1995, WBIPC requested authorization to replace the 10-inch inside diameter mufflers on the three compressor engines with mufflers having a 14-inch inside diameter in order to reduce back pressure. This modification would also increase overall stack height by 2-feet-2-inches to a total height of 30 feet. WBIPC's proposal anticipated changing one muffler per year over the next three years, and the Department approved the request in a September 7, 1995, letter.

On February 14, 1998, WBIPC requested the Department to modify MAQP #2803-00 to allow them to incorporate changes under ARM 17.8.705(q). MAQP #2803-01 was issued on May 8, 1998, and allowed the swing engine methodology that WBIPC practices to ensure proper engine maintenance and operations. There were no changes expected in compression capabilities or averages as a result of the swing methodology. There were no changes expected in emissions from the facility as a result of the swing methodology. **MAQP #2803-01** replaced MAQP #2803-00.

On April 25, 2002, the Department of Environmental Quality (Department) received a letter from WBIPC requesting to modify MAQP #2803-01. In the letter, WBIPC requested to remove the every 4-year testing requirements for Units #1, #2, and #3 from Permit #2803-01 because WBIPC's operating permit (#OP2803-00) requires the units to be tested every 6 months. This permit action removed the every 4-year testing requirements from the permit. In addition, the permit format and the permit language were updated. **MAQP #2803-02** replaced MAQP #2803-01.

On December 4, 2012, the Department received correspondence from WBI as notification of a change in company name from Williston Basin Interstate Pipeline Company to WBI Energy Transmission, Inc. The permit action reflected this change in company name as well as updated the Montana Air Quality Permit (MAQP) to reflect current Department format, rule references, and language. **MAQP #2803-03** replaced #2803-02.

Title V Operating Permit (OP)

Operating Permit #OP2803-00 was issued final and effective on November 10, 1997.

The Department issued the renewal of WBIPC's Title V Operating Permit #OP2803-00 for the Fort Peck Compressor Station final and effective on June 21, 2003. WBIPC's Operating Permit #OP2803-00 was applicable for 5 years and expired on November 11, 2002. WBIPC applied for a renewal of their Title V Operating Permit on April 29, 2002. **Operating Permit #OP2803-01** replaced Operating Permit #OP2803-00.

The Department received a renewal application on December 19, 2007 and issued the renewal of WBIPC's Title V Operating Permit for the Fort Peck Compressor Station effective on June 19, 2009. Title V **Operating Permit #OP2803-02** replaced Operating Permit #OP2803-01.

On December 10, 2012 the Department received a request to change the permittee name from Williston Basin Interstate Pipeline Company to WBI Energy Transmission, Inc. (WBI). The Department updated the permit as requested. Title V **Operating Permit #OP2803-03** replaced Title V Operating Permit #OP2803-02.

On October 17, 2013, the Department received a letter from WBI requesting a Responsible Official change in which Mr. Marc Dempewolf replaced Mr. Scott Fradenburgh. Mr. Fradenburgh is now the Alternate Responsible Official for WBI facilities in the State of Montana. As such, **Operating Permit #OP2803-04** replaced Operating Permit #OP2803-03.

On September 10, 2013, the Department received a renewal application for Title V Operating Permit #OP2803-03. WBI also requested that the Department update the permit to include new applicable requirements (40 CFR 63, ZZZZ). Subsequently, as noted above, the Department received a letter from WBI requesting an administrative amendment (AA) to change the responsible official. At the request of WBI, the AA was processed prior to the renewal. Although, the application for the permit renewal was received prior to the AA, the AA was issued as #OP2803-04. Therefore, renewal of WBI's Title V **Operating Permit #OP2803-05** replaces Operating Permit #OP2803-04.

D. Current Permit Action

On December 20, 2018, the Department received a Title V Operating Permit Renewal Application from WBI. No changes to the Operating Permit were listed in the application. **Operating Permit #OP2803-06** replaces Operating Permit #OP2803-05.

E. Taking and Damaging Analysis

HB 311, the Montana Private Property Assessment Act, requires analysis of every proposed state agency administrative rule, policy, permit condition or permit denial, pertaining to an environmental matter, to determine whether the state action constitutes a taking or damaging of private real property that requires compensation under the Montana or U.S. Constitution. As part of issuing an operating permit, the Department is required to complete a Taking and Damaging Checklist. As required by 2-10-101 through 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged

YES	NO	
		or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

F. F. Compliance Designation

The WBI Fort Peck Compressor Station was inspected by the Department on November 15, 2018. The inspection findings and all material reviewed in the Department's files indicated that the facility was in compliance with the limits and conditions of MAQP #2803-03 and Title V Operating Permit #OP2803-05.

II. SUMMARY OF EMISSIONS UNITS

A. Facility Process Description

The Fort Peck Compressor Station serves as a natural gas pipeline booster station. It receives 20 to 25-million standard cubic feet (MMscf) per day of compressed natural gas from WBI's Saco Compressor Station and delivers it to WBI's Vida Compressor Station. The maximum daily compression capability of the Fort Peck Compressor Station is 30-MMscf per day. The Standard Industrial Classification (SIC) for this facility is "Natural Gas Transmission", which has an SIC Code of "4922".

B. Emissions Units and Pollution Control Device Identification

Currently, the Fort Peck Compressor Station has three 800-hp Superior 6GTL turbocharged compressor engines. NO_x and CO emissions from each engine are controlled with an electronic AFR controller, while burning pipeline quality natural gas in these engines minimizes VOC emissions. The facility has an uncontrolled 360-hp Waukesha F2895GU emergency generator engine that operates only when purchased electrical power is unavailable or during periods of maintenance. WBI has considered placing the generator into continuous service if it becomes more economical than purchasing electricity from the utility company. When this conversion occurs, WBI will be required to install, operate, and properly maintain an AFR controller on the generator engine.

C. Categorically Insignificant Sources/Activities

This facility has several pieces of equipment that are insignificant emission units. They include: one 1.35-MMBtu/hr Eclipse boiler; one 32-thousand Btu per hour (MBtu/hr) Rudd water heater; a 100Mbtu/hr Modine Heater; one 16-MBtu/hr Magic Chef space heater; one 1,000-gallon slop tank; fugitive emissions from valves, flanges, open-ended lines, etc.; and emissions from equipment blowdowns prior to maintenance activities.

III. PERMIT CONDITIONS

A. Emission Limits and Standards

Emission limits for the three compressor engines and the generator engine were established by a BACT determination under the authority of ARM 17.8.752. Each compressor engine has an emission limit of 13.23 pound per hour (lb/hr) NO_X, 5.29 lb/hr CO, and 2.12 lb/hr VOC. The emergency generator engine is limited to 500 hours of operation per year in order to comply with the EPA definition of an "emergency backup generator." If WBI operates the generator continuously, then WBI will be required to install, operate and properly maintain an AFR controller on the generator engine. The unit will have emission limits of 8.73 lb/hr NO_x, 8.73 lb/hr CO, and 3.97 lb/hr VOC.

Stationary engines are subject to 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants from Stationary Reciprocating Internal Combustion Engines. No other emission units at this facility are subject to any current MACT, NESHAP, or NSPS standards. This facility is not subject to PSD regulations.

B. Monitoring Requirements

ARM 17.8.1212(1) requires that all monitoring and analysis procedures or test methods required under applicable requirements are contained in operating permits. In addition, when the applicable requirement does not require periodic testing or monitoring, periodic monitoring must be prescribed that is sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit.

The requirements for testing, monitoring, recordkeeping, reporting, and compliance certification sufficient to assure compliance do not require the permit to impose the same level of rigor for all emissions units. Furthermore, they do not require extensive testing or monitoring to assure compliance with the applicable requirements for emissions units that do not have significant potential to violate emissions limitations or other requirements under normal operating conditions. When compliance with the underlying applicable requirement for an insignificant emissions unit is not threatened by lack of regular monitoring and when periodic testing or monitoring is not otherwise required by the applicable requirement, the status quo **(i.e., no monitoring)** will meet the requirements of ARM 17.8.1212(1). Therefore, the permit does not include monitoring for insignificant emissions units.

The permit includes periodic monitoring or recordkeeping for each applicable requirement. The information obtained from the monitoring and recordkeeping will be used by the permittee to periodically certify compliance with the emission limits and standards. However, the Department may request additional testing to determine compliance with the emission limits and standards.

C. Test Methods and Procedures

The operating permit may not require testing for all sources if routine monitoring is used to determine compliance, but the Department has the authority to require testing if deemed necessary to determine compliance with an emission limit or standard. In addition, the permittee may elect to voluntarily conduct compliance testing to confirm its compliance status.

D. Recordkeeping Requirements

The permittee is required to keep all records listed in the operating permit as a permanent business record for at least five years following the date of the generation of the record.

E. Reporting Requirements

Reporting requirements are included in the permit for each emissions unit and Section V of the operating permit "General Conditions" explains the reporting requirements. However, the permittee is required to submit semi-annual and annual monitoring reports to the Department and to annually certify compliance with the applicable requirements contained in the permit. The reports must include a list of all emission limit and monitoring deviations, the reason for any deviation, and the corrective action taken as a result of any deviation.

F. Public Notice

In accordance with ARM 17.8.1232, a public notice was published in *The Glasgow Courier* newspaper on or before April 23, 2019. The Department provided a 30-day public comment period on the draft operating permit from April 23, 2019 to May 23, 2019. ARM 17.8.1232 requires the Department to keep a record of both comments and issues raised during the public participation process. The comments and issues received by May 23, 2019 will be summarized, along with the Department's responses, in the following table. All comments received during the public comment period will be promptly forwarded to WBI so they may have an opportunity to respond to these comments as well.

Summary of Public Comments

Person/Group Commenting	Comment	Department Response
No Public Comments Submitted		

G. Draft Permit Comments

Summary of Permittee Comments

Permit Reference	Permittee Comment	Department Response
No Permittee Comments Submitted		

Summary of EPA Comments

Permit Reference	EPA Comment	Department Response

IV. NON-APPLICABLE REQUIREMENTS ANALYSIS

Section IV of the operating permit "Non-applicable Requirements" contains the requirements that the Department determined were non-applicable. The following table summarizes the requirements that WBI identified as non-applicable and contains the reasons that the Department did not include these requirements as non-applicable in the permit.

Requirement not Identified in the Operating Permit

Applicable Requirement	Reason
40 CFR 60, Subpart A - General Provisions	This federal regulation consists of an applicability statement. These regulations may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit.

V. FUTURE PERMIT CONSIDERATIONS

A. MACT Standards (Part 63)

As of the issuance date of Operating Permit #OP2803-06, WBI is subject to the area source provisions of 40 CFR 63, Subpart ZZZZ because the facility has stationary reciprocating internal combustion engines. The Department is unaware of any proposed or pending MACT standards that may be promulgated that will affect the Fort Peck Compressor Station.

B. NESHAP Standards (Part 61)

As of the issuance date of Operating Permit #OP2803-06, the Department is unaware of any future NESHAP Standards that may be promulgated that will affect this facility.

C. NSPS Standards

As of the issuance date of Operating Permit #OP2803-06, the Department is unaware of any future NSPS Standards that may be promulgated that will affect this facility.

D. Risk Management Plan

As of the issuance date of Operating Permit #OP2803-06, this facility does not exceed the minimum threshold quantities for any regulated substance listed in 40 CFR 68.115 for any facility process. Consequently, this facility is not required to submit a Risk Management Plan.

If a facility has more than a threshold quantity of a regulated substance in a process, the facility must comply with 40 CFR 68 requirements no later than June 21, 1999; three years after the date on which a regulated substance is first listed under 40 CFR 68.130; or the date on which a regulated substance is first present in more than a threshold quantity in a process, whichever is later.

E. Compliance Assurance Monitoring (CAM) Applicability

An emitting unit located at a Title V facility that meets the following criteria listed in ARM 17.8.1503 is subject to Subchapter 15 and must develop a CAM Plan for that unit:

- The emitting unit is subject to an emission limitation or standard for the applicable regulated air pollutant (unless the limitation or standard is exempt under ARM 17.8.1503(2));
- The emitting unit uses a control device to achieve compliance with such limit; and
- The emitting unit has potential pre-control device emissions of the applicable regulated air pollutants that are greater than major source thresholds.

WBI does not currently have any emitting units that meet all the applicability criteria in ARM 17.8.1503, and is therefore not required to develop a CAM Plan.

F. PSD and Title V Greenhouse Gas Tailoring Rule

On May 7, 2010, EPA published the "light duty vehicle rule" (Docket # EPA-HQ-OAR-2009-0472, 75 FR 25324) controlling greenhouse gas (GHG) emissions from mobile sources, whereby GHG became a pollutant subject to regulation under the Federal and Montana Clean Air Act(s). On June 3, 2010, EPA promulgated the GHG "Tailoring Rule" (Docket # EPA-HQ-OAR-2009-0517, 75 FR 31514) which modified 40 CFR Parts 51, 52, 70, and 71 to specify which facilities are subject to GHG permitting requirements and when such facilities become subject to regulation for GHG under the PSD and Title V programs.

Under the Tailoring Rule, any PSD action (either a new major stationary source or a major modification at a major stationary source) taken for a pollutant or pollutants other than GHG that would become final on or after January 2, 2011 would be subject to PSD permitting requirements for GHG if the GHG increases associated with that action were at or above 75,000 TPY of carbon dioxide equivalent (CO_2e) and greater than 0 TPY on a mass basis. Similarly, if such action were taken, any resulting requirements would be subject to inclusion in the Title V Operating Permit. Facilities which hold Title V permits due to criteria pollutant emissions over 100 TPY would need to incorporate any GHG applicable requirements into their operating permits for any Title V action that would have a final decision occurring on or after January 2, 2011.

Starting on July 1, 2011, PSD permitting requirements would be triggered for modifications that were determined to be major under PSD based on GHG emissions alone, even if no other pollutant triggered a major modification. In addition, sources that are not considered PSD major sources based on criteria pollutant emissions would become subject to PSD review if their facility-wide potential emissions equaled or exceeded 100,000 TPY of CO_2e and 100 or 250 TPY of GHG on a mass basis depending on their listed status in ARM 17.8.801(22) and they undertook a permitting action with increases of 75,000 TPY or more of CO_2e and greater than 0 TPY of GHG on a mass basis. With respect to Title V, sources not currently holding a Title V permit that have potential facility-wide emissions equal to or exceeding 100,000 TPY of CO_2e and 100 TPY of GHG on a mass basis would be required to obtain a Title V Operating Permit.

The Supreme Court of the United States (SCOTUS), in its *Utility Air Regulatory Group v. EPA* decision on June 23, 2014, ruled that the Clean Air Act neither compels nor permits EPA to require a source to obtain a PSD or Title V permit on the sole basis of its potential emissions of GHG. SCOTUS also ruled that EPA lacked the authority to tailor the Clean Air Act's unambiguous numerical thresholds of 100 or 250 TPY to accommodate a CO_2e threshold of 100,000 TPY. SCOTUS upheld that EPA reasonably interpreted the Clean Air Act to require sources that would need PSD permits based on their emission of conventional pollutants to comply with BACT for GHG. As such, the Tailoring Rule has been rendered invalid and sources cannot become subject to PSD or Title V regulations based on GHG emissions alone. Sources that must undergo PSD permitting due to pollutant emissions other than PSD may still be required to comply with BACT for GHG emissions.